

SOFTWARE DOWNLOAD for Building Mobile Applications with PhoneGap Workshop – InterLab 2011

While PhoneGap is available on multiple platforms, in our workshop we will focus on the Android tool chain as it is the one that is easiest to install and it works on Mac, PC and Linux.

Download and install the necessary software:

- 1) Download and install [Eclipse Classic](#).
- 2) Download and install the [Android SDK](#).
- 3) Download and install the [ADT Plugin](#).
- 4) Download the latest [PhoneGap release](#).

Setup your first project. Don't worry if you don't get to this step we'll go over it in the workshop but if you want to make sure everything is installed properly this is the way to verify it.

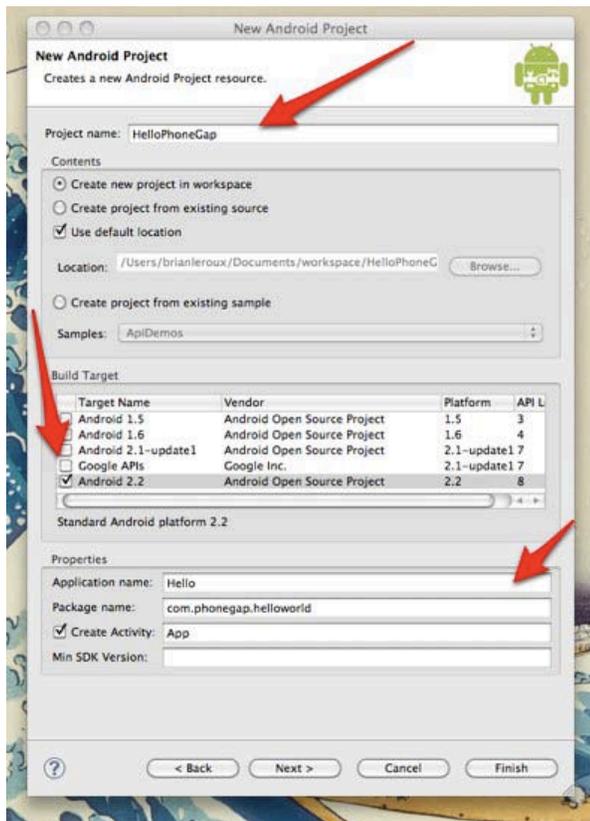
- 1) Start Eclipse
- 2) Under the File menu select New > Android Project

For the project name type: *HelloPhoneGap*

For the build target select the highest Android version, hopefully Android 3.1.

For the application name type: *Hello*

Make sure the create activity box is checked and type in *App* for the activity name

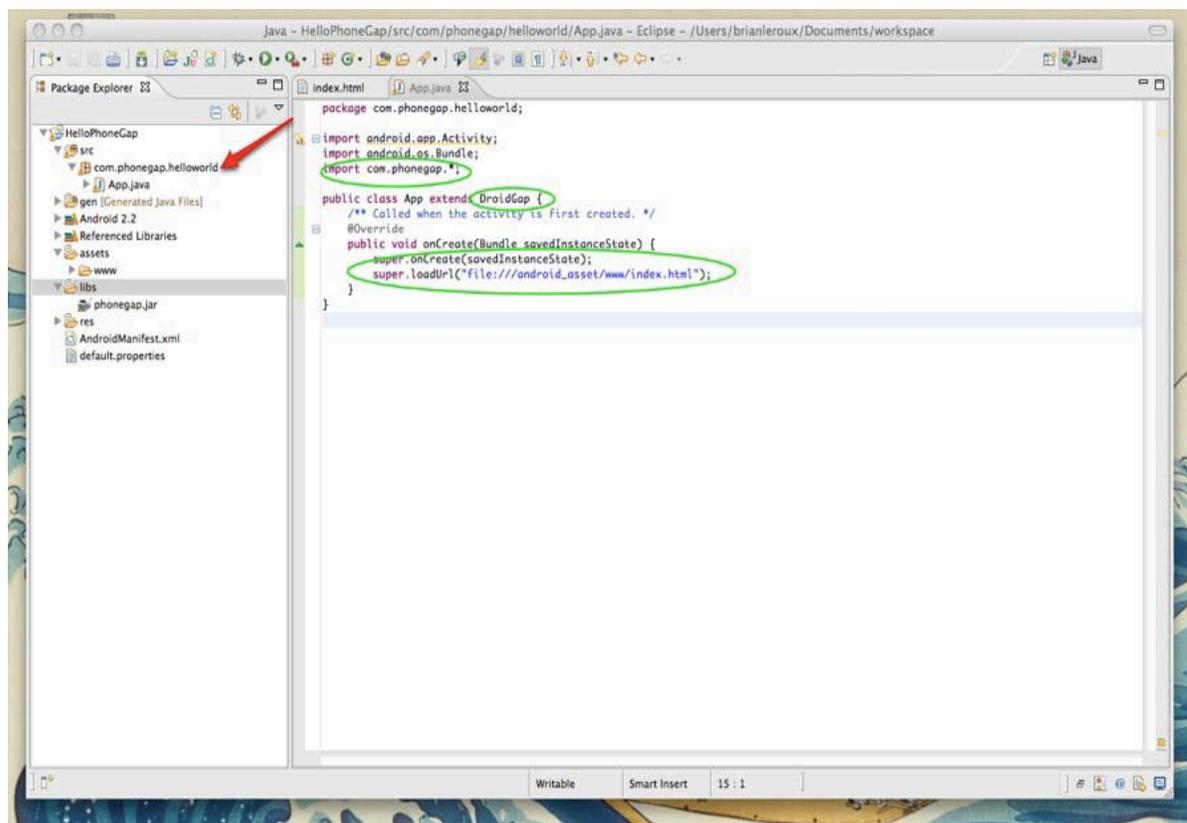


- 3) In the root directory of the project, create two new directories:

/libs
/assets/www

- 4) Copy phonegap-1.0.0.js from your PhoneGap download earlier to /assets/www
Copy phonegap-1.0.0.jar from your PhoneGap download earlier to /libs
Copy xml folder from your PhoneGap download earlier to /res
- 5) Make a few adjustments too the project's main Java file found in the src folder in Eclipse: (view image below)

Change the class's extend from **Activity** to **DroidGap** Replace the **setContentView()** line with **super.loadUrl("file:///android_asset/www/index.html");**
Add **import com.phonegap.*;**
Remove **import android.app.Activity;**



- 6) You will experience an error here, Eclipse can't find phonegap-1.0.0.jar. In this case, right click on the /libs/phonegap-1.0.0.jar file and go to Build Paths > Add to Build Path. If Eclipse is being temperamental, you might need to refresh (F5) the project once again.
- 7) Right click on AndroidManifest.xml and select **Open With > Text Editor**

Paste the following permissions under versionName: (view image below)

```
<supports-screens
android:largeScreens="true"
android:normalScreens="true"
android:smallScreens="true"
android:resizeable="true"
```

```
android:anyDensity="true"
/>
<uses-permission android:name="android.permission.CAMERA" />
<uses-permission android:name="android.permission.VIBRATE" />
<uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
<uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
<uses-permission android:name="android.permission.ACCESS_LOCATION_EXTRA_COMMANDS" />
<uses-permission android:name="android.permission.READ_PHONE_STATE" />
<uses-permission android:name="android.permission.INTERNET" />
<uses-permission android:name="android.permission.RECEIVE_SMS" />
<uses-permission android:name="android.permission.RECORD_AUDIO" />
<uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS" />
<uses-permission android:name="android.permission.READ_CONTACTS" />
<uses-permission android:name="android.permission.WRITE_CONTACTS" />
<uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
<uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" /> <uses-permission
android:name="android.permission.GET_ACCOUNTS" />
```

- 8) Add `android:configChanges="orientation|keyboardHidden"` to the activity tag in `AndroidManifest`. (view image below)
- 9) Add a second activity under you application tag in `AndroidManifest`. (view image below)

```
<activity android:name="com.phonegap.DroidGap" android:label="@string/app_name"
android:configChanges="orientation|keyboardHidden"> <intent-filter> </intent-filter> </activity>
```

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android" android:windowSoftInputMode="adjustPan"
    package="com.phonegap" android:versionName="1.1" android:versionCode="5">
    <supports-screens
        android:largeScreens="true"
        android:normalScreens="true"
        android:smallScreens="true"
        android:xlargeScreens="true"
        android:resizeable="true"
        android:anyDensity="true"
    />

    <uses-permission android:name="android.permission.CAMERA" />
    <uses-permission android:name="android.permission.VIBRATE" />
    <uses-permission android:name="android.permission.ACCESS_COARSE_LOCATION" />
    <uses-permission android:name="android.permission.ACCESS_FINE_LOCATION" />
    <uses-permission android:name="android.permission.ACCESS_LOCATION_EXTRA_COMMANDS" />
    <uses-permission android:name="android.permission.INTERNET" />
    <uses-permission android:name="android.permission.RECEIVE_SMS" />
    <uses-permission android:name="android.permission.RECORD_AUDIO" />
    <uses-permission android:name="android.permission.RECORD_VIDEO" />
    <uses-permission android:name="android.permission.MODIFY_AUDIO_SETTINGS" />
    <uses-permission android:name="android.permission.READ_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_CONTACTS" />
    <uses-permission android:name="android.permission.WRITE_EXTERNAL_STORAGE" />
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />
    <uses-permission android:name="android.permission.GET_ACCOUNTS" />
    <uses-permission android:name="android.permission.BROADCAST_STICKY" />

    <uses-feature android:name="android.hardware.camera" />
    <uses-feature android:name="android.hardware.camera.autofocus" />

    <application android:icon="@drawable/icon" android:label="@string/app_name"
        android:debuggable="true">
        <activity android:name=".test"
            android:label="@string/app_name" android:configChanges="orientation|keyboardHidden">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />
                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
        <activity android:name="com.phonegap.DroidGap" android:label="@string/app_name"
            android:configChanges="orientation|keyboardHidden">
            <intent-filter>
            </intent-filter>
        </activity>
    </application>

    <uses-sdk android:minSdkVersion="2" />
</manifest>

```

10) Now create and open a new file named **index.html** in the **/assets/www** directory. Paste the following code:

```

<!DOCTYPE HTML>
<html>
<head>
<title>PhoneGap</title>
<script type="text/javascript" charset="utf-8" src="phonegap-1.0.0.js"></script>
</head>
<body>
<h1>Hello World</h1>
</body>
</html>

```

11) Right click the project and go to **Run As** and click **Android Application**
Eclipse will ask you to select an appropriate AVD. If there isn't one, then you'll need to create it.